

METHOD OF OPERATING A HYBRID ELECTRIC VEHICLE TO REDUCE EMISSIONS

Abstract

A method of operating a hybrid electric vehicle 10 to reduce emissions. The method utilizes the vehicle's electric motor/generator 12 to generate a negative torque during cold-start conditions, effective to increase the load on the internal combustion engine 16, thereby reducing the light-off time of the catalytic converter 28. The method also reduces emissions by utilizing the vehicle's motor/generator 12 to provide a supplemental torque to engine 16 during transient events, thereby reducing the generated mass flow and amount of untreated emissions.